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ABSTRACT

A recent study concluded that the requirements for the completion of apprenticeship training programs should be based on competence rather than the period of participation in the programs. If providers of apprenticeship training programs are to be able to follow this recommendation and to effect other changes in the structure of apprenticeship training programs that have become necessary as a result of recent technological, demographic, and economic changes, then a strong collaborative partnership must be maintained between the vocational education and private sectors. The two sectors must provide joint support for the following: research and development, demonstration projects and activities, curriculum development and related instruction, and apprenticeship school linkage activities. In 1983, the U.S. Department of Education implemented several important projects in the areas of improvement of related instruction in apprenticeship training and improvement of linkages between vocational education and organized labor in the United States. Moreover, the new Federal legislation, the Carl D. Perkins Vocational Education Act of 1984, contains several provisions geared toward improving the linkages and collaboration between apprenticeship and vocational education. (MN)

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APPRENTICESHIP TRAINING AND VOCATIONAL EDUCATION

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PRESENTED TO
THE AMERICAN VOCATIONAL ASSOCIATION
SPECIAL SESSION ON APPRENTICESHIP

BY
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NEW ORLEANS, LOUISIANA

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LADIES AND GENTLEMEN, DISTINGUISHED MEMBERS ON THE DAIS, HONORED GUESTS, IT IS A PLEASURE TO HAVE THIS OPPORTUNITY TO PARTICIPATE IN WHAT IS BECOMING AN ANNUAL MEETING ON APPRENTICESHIP.

I AM PARTICULARLY PLEASED TO HAVE BEEN INVITED, BECAUSE IT IS VITAL TO THIS NATION THAT WE WORK TOGETHER TO IMPROVE THE QUALITY OF EDUCATION AND TRAINING OF A SKILLED WORKFORCE. TO THE DEGREE THAT WE ARE SUCCESSFUL WE WILL ENHANCE OUR ABILITY TO COMPETE AND HAVE A GREATER SHARE OF THE WORLD'S MARKET.

WE MUST CONTINUE TO DEVELOP, REFINE AND MAINTAIN STRONG LINKAGES. VOCATIONAL EDUCATION AND APPRENTICESHIP TRAINING HAVE BEEN PARTNERS SINCE THE NATIONAL APPRENTICESHIP ACT (FITZGERALD ACT) WAS ENACTED IN 1937, OVER 47 YEARS AGO. I AM HERE TODAY TO REAFFIRM THAT PARTNERSHIP AND SUGGEST THAT WE FORGE AN EVEN STRONGER ALLIANCE BETWEEN THE TWO SYSTEMS OF EDUCATION AND TRAINING.

I CONSIDER YOUR INVITATION TIMELY, BECAUSE IT PROVIDES ME THE OPPORTUNITY TO SHARE SOME ITEMS OF RELATED INTEREST, IN ADDITION TO UPDATING YOU ON SOME AREAS OF MUTUAL CONCERN REGARDING IMPROVING THE QUALITY OF VOCATIONAL EDUCATION AND TRAINING.

THE NATIONAL ACADEMY OF SCIENCES RESEARCH REPORT, EDUCATION FOR TOMORROW'S JOBS, CLARIFIES THE ROLE VOCATIONAL EDUCATION CAN PLAY IN ECONOMIC DEVELOPMENT. IT STATES: "IN ECONOMIC TERMS, VOCATIONAL EDUCATION CAN BE VIEWED AS AN INVESTMENT IN HUMAN CAPITAL TO THE EXTENT THAT IT CONTRIBUTES TO THE FUTURE EARNINGS (AND THEREBY INCREASING PRODUCTIVITY) OF ITS GRADUATES WHO ARE EMPLOYED." THIS REPORT, AS YOU MAY KNOW, WAS THE RESULT OF A PROJECT FUNDED BY THE U.S. DEPARTMENT OF EDUCATION. THE SUBJECT OF THIS REPORT WAS APPROVED BY THE GOVERNING BOARD OF THE NATIONAL RESEARCH COUNCIL, WHOSE MEMBERS ARE DRAWN FROM THE COUNCILS OF THE NATIONAL ACADEMY OF SCIENCES, THE NATIONAL ACADEMY OF ENGINEERING, AND THE INSTITUTE OF MEDICINE. THE MEMBERS OF THE COMMITTEE RESPONSIBLE FOR THE REPORT WERE CHOSEN FOR THEIR SPECIAL COMPETENCIES AND WITH REGARD FOR APPROPRIATE BALANCE.

THE MEMBERS OF THE COMMITTEE WERE:

COLIN C. BLAYDON (CHAIR), VICE PROVOST, DUKE UNIVERSITY

WILLIAM A. MORRILL (VICE CHAIR), MATHEMATICA POLICY RESEARCH, INC., PRINCETON, NEW JERSEY

CHARLES S. BENSON, DEPARTMENT OF EDUCATION, UNIVERSITY OF CALIFORNIA, BERKELEY

Charles Bradford, International Association of Machinists and Aerospace Workers, Washington, D.C.

Pat Choate, TRW, Inc., Washington, D.C.

Pedro Garza, SER-Jobs for Progress, Dallas, Texas

James M. Howell, First National Bank of Boston

Janice Madden, Department of Regional Science, University of Pennsylvania

Paul E. Peterson, Committee on Public Policy Studies, University of Chicago

George R. Quarles, Office of Occupational and Career Education, New York City Board of Education

Wilson C. Riles, California State Department of Education, Sacramento

Isabel V. Sawhill, The Urban Institute, Washington, D.C.

Richard F. Schubert, Bethlehem Steel, Bethlehem, Pennsylvania

Francis T. Tuttle, Oklahoma State Department of Vocational and Technical Education, Stillwater

David A. Wise, John F. Kennedy School of Government, Harvard University

Susan W. Sherman, Study Director

Barbara A. Malone, Administrative Secretary

The study made two significant recommendations regarding apprenticeship.

1. Competency-Based Work-Experience Programs

Unions, educators, and employers should work to change the requirements for the completion of cooperative education and apprenticeship programs; they should be based on competence rather than time.

2. Apprenticeship Programs

The OVAE should work with the Federal Committee on Apprenticeship and the Bureau of Apprenticeship Training in the U.S. Department of Labor to revise the criteria for completion of apprenticeship programs. Completion should be based on competence rather than the period of participation in the programs.

In order for the two recommendations to be considered and thus acted upon, a strong collaborative partnership designed for positive change must exist. This partnership must be based on trust, commitment to the development of a skilled workforce, and to some extent a commonality of concerns and responsibilities.

Vocational Education is an enterprise including more than 19,000 institutions, such as area vocational technical schools, area vocational centers, community colleges, junior colleges, technical comprehensive high schools and four-year colleges offering a great variety of programs. Vocational education serves more than 17 million of this nation's youth and adults--including 186,000 registered apprentices through their related instruction-- at a total annual cost of approximately $8 billion, local, State and Federal funds combined.

THESE VOCATIONAL PROGRAMS RANGE FROM INTRODUCTORY VOCATIONAL GUIDANCE AND PRE-VOCATIONAL INDUSTRIAL ARTS AT THE MIDDLE-SCHOOL LEVEL TO HIGHLY SOPHISTICATED TECHNICIAN TRAINING IN TECHNICAL INSTITUTES AND COMMUNITY COLLEGES. MANY OF THESE PROGRAMS INVOLVE CLOSE COLLABORATION WITH BUSINESS, INDUSTRY, AND LABOR. MANY DIFFERENT TYPES OF COOPERATIVE VOCATIONAL EDUCATION, APPRENTICE-SHIP, AND "QUICK START" CUSTOMIZED TRAINING FOR NEW INDUSTRIES CONTRIBUTE TO BOTH LOCAL AND STATE ECONOMIC DEVELOPMENT. I HAVE EMPHASIZED THE MANY PURPOSES AND OFFERINGS IN VOCATIONAL EDUCA-TION, BECAUSE THE CHANGES THAT WE, AS A NATION, WILL ENCOUNTER DURING THE LAST HALF OF THE 1980'S ARE OF SIMILAR BREADTH.

THERE ARE THREE MAJOR CHANGES THAT WILL CONTINUE TO HAVE A SIGNIFICANT IMPACT ON EDUCATION AND TRAINING IN THIS NATION:

ECONOMIC CHANGE: WE HAVE THE PROBLEMS OF OVERALL LOW PRODUCTIVITY (THOUGH IT HAS BEEN IMPROVING OVER THE LAST 2 YEARS), A DETERIORATING COMPETITIVE POSITION IN SOME INDUS-TRIES, AND AGING AND INEFFICIENT PLANTS.

Technological Change: Industries are changing rapidly as completely new technologies are being introduced. New investment in industrial research and development will accelerate the change. Advances in information technology and increased use of automated equipment is also creating massive change. Skills are becoming obsolete in many occupations. There is a continuing need for training and retraining.

Demographic Change: The American workforce is aging. A decrease in the percentage of youth in the workforce is projected, but with an increase of minority youth available for employment. Skilled workers from the "frost belt" are migrating to the "sun belt." The workforce is gradually moving toward the service sector and white collar occupations and away from the manufacturing sector and blue collar occupations. Adults are tending to remain in the workforce longer and are opting for later retirement. There is a continued influx of women into the workforce and an increase in the number of skilled adults whose jobs are being lost through structural adjustments in the national and international markets. The workforce is increasingly mobile, while there is a continuing concentration of poor, unskilled or low-skilled workers in densely populated urban centers.

BECAUSE OF THESE CHANGES, THE AGENDA FOR THE DEVELOPMENT OF THE SKILLED WORKFORCE FOR THE 1980'S IS FAR MORE COMPLEX AND DEMANDING THAN THAT OF THE 1960'S AND EARLY 1970'S. IT WILL REQUIRE A MORE COMPREHENSIVE AND COLLABORATIVE UTILIZATION AND SHARING OF OUR SCARCE RESOURCES. THE PUBLIC AND PRIVATE SECTORS MUST CONTINUE TO WORK TOGETHER TO BRING THIS WORKFORCE AGENDA FOR THE 1980'S TO FRUITION.

FOR CENTURIES APPRENTICESHIPS HAVE BEEN, AND CONTINUE TO BE, AN IMPORTANT METHOD OF TRAINING. THOUSANDS OF INDIVIDUALS HAVE BEEN TRAINED TO PERFORM EFFECTIVELY IN HIGHLY SKILLED AND TECHNICAL OCCUPATIONS, TO THE ADVANTAGE OF BOTH THE INDIVIDUAL AND INDUSTRY. MANY OF THESE INDIVIDUALS, AFTER COMPLETING THEIR APPRENTICESHIPS AND ACHIEVING EXCELLENCE IN THEIR RESPECTIVE OCCUPATIONS, HAVE MOVED ON TO EXCEL IN OTHER AREAS OF OUR SOCIETY.

APPRENTICESHIP TRAINING HAS BEEN THE CATALYST FOR MANY AMERICANS TO CONTRIBUTE IN MANY DIFFERENT WAYS TO OUR NATION. OUR NATION WAS BUILT ON A SOLID FOUNDATION OF SKILLED CRAFTSMEN, MANY OF WHOM SERVED APPRENTICESHIPS. BENJAMIN FRANKLIN BEGAN HIS LONG AND DISTINGUISHED CAREER AS A PRINTER'S APPRENTICE. YOU MAY HAVE READ ONE OF HIS MOST FAMOUS QUOTATIONS: "HE WHO HATH A TRADE HATH AN ESTATE."

PAUL REVERE, WHO MADE HISTORY THROUGH HIS MIDNIGHT RIDE TO WARN OF THE BRITISH ATTACK, SERVED AN APPRENTICESHIP AS A SILVERSMITH.

THE IMPORTANCE OF OUR SKILLED TRADESMEN AND WOMEN WAS FURTHER STRESSED BY PRESIDENT REAGAN AT THE 19TH ANNUAL NATIONAL VOCATIONAL INDUSTRIAL CLUBS OF AMERICA LEADERSHIP CONFERENCE AND THE UNITED STATES SKILL OLYMPICS IN LOUISVILLE, KENTUCKY, WHEN HE STATED:

> "AMERICA'S TRADESMEN AND WOMEN ARE THE PISTONS THAT DRIVE THE ENGINE OF OUR ECONOMY. THIS COUNTRY WAS BUILT WITH THE SWEAT AND DETERMINATION OF HARD-WORKING MEN AND WOMEN WHO, LIKE MANY OF YOU, LOVED TO WORK WITH THEIR HANDS AS WELL AS THEIR MINDS. YOUR FORE-RUNNERS WERE AMERICA'S LINK BETWEEN OUR DREAMS AND REALITY. THEY WERE THE PEOPLE WHO TRANSFORMED THIS CONTINENT INTO ONE OF THE WONDERS OF THE MODERN WORLD. WE ARE A NATION OF PEOPLE WHO BELIEVE IT'S NOT ENOUGH TO BE GOOD, YOU'VE GOT TO BE <u>GOOD AT SOMETHING</u>."

TOGETHER, THE VOCATIONAL EDUCATION AND APPRENTICESHIP CONFRATERNITIES MUST MEET THE CHALLENGE OF INCREASING THE SKILLS AND PRODUCTIVITY OF AMERICA'S WORK FORCE. WE CAN BEGIN BY PROMOTING AND SUPPORTING THE FOLLOWING:

-- <u>RESEARCH AND DEVELOPMENT</u> -- JOINTLY FUNDED PROJECTS THAT WILL PROMOTE A COMPREHENSIVE REFINEMENT AND DEVELOPMENT OF THE <u>PROGRAM</u>.

-- Demonstration Projects and Activities -- Projects and activities designed to expand apprenticeship opportunities and equal access.

-- Curriculum Development and Related Instruction, including pre-apprenticeship curriculum materials.

-- Apprenticeship School Linkage Activities (ASL) -- Promote the expansion of ASL activities. The ASL program grew out of the need to bridge the gap between school and the world of work, and to ease the school-to-work transition of our youth.

I will personally be encouraging State Education Agencies (SEAs), Local Education Agencies (LEAs), State Directors and other appropriate organizations and associations in the vocational education community to promote and support these activities.

Last year, our Federal allocation to States for program improvement and supportive services (Subpart A) was approximately $100 million. A few of the programs funded at the national and State levels with program improvement funds are:

- Improvement of Related Instruction in Apprenticeship Instruction

  -- Ten compentency-based teacher education modules and an implementation plan for their use were developed for teachers of related instruction.

  -- Also, ten applied knowledge competency modules were developed for use of apprentices in learning skills related to their craft.

  -- Four regional diffusion workshops were conducted for apprenticeship training personnel to promote nationwide use of the instructor and apprenticeship training modules.

- The Papago Skills Center, Sells, Arizona
  pre-apprenticeship and apprenticeship related training.

- An analysis of instructional apprenticeship services in public schools, Rio Hondo, California.

- A survey of practices for the granting of advance standing or credit for previously acquired experience, training, or skills in apprenticeship.

THERE ARE TWO OTHER SIGNIFICANT PROJECTS THAT I THINK BEAR MENTIONING:

- A GUIDE TO LINKAGES BETWEEN VOCATIONAL EDUCATION AND ORGANIZED LABOR IN THE UNITED STATES. THE PURPOSES OF THE STUDY ARE TO:

  -- IDENTIFY AND DESCRIBE THE LINKAGES THAT CURRENTLY EXIST BETWEEN DOMESTIC VOCATIONAL EDUCATION AND ORGANIZED LABOR.

  -- IDENTIFY AND DESCRIBE THE LINKAGES THAT CURRENTLY EXIST BETWEEN VOCATIONAL EDUCATION AND ORGANIZED LABOR IN OTHER COUNTRIES.

  -- DEVELOP A MULTI-YEAR PROGRAM WITH SPECIFIC RECOMMENDATIONS AND ACTIVITIES THAT COULD BE IMPLEMENTED TO IMPROVE VOCATIONAL EDUCATION BY STRENGTHENING ITS LINKAGES WITH ORGANIZED LABOR.

THIS PROJECT WAS A JOINT INITIATIVE BY THE OFFICE OF VOCATIONAL AND ADULT EDUCATION, THE NATIONAL CENTER FOR RESEARCH ON VOCATIONAL EDUCATION AND THE AFL-CIO FREE TRADE UNION INSTITUTE.

- The "Precision Metalworking Skills Project" (funded by OVAE and conducted jointly by National Task Force on Skilled Workforce Shortages, the National Center for Research on Vocational Education and OVAE). The purpose of this effort is to enhance the skills and qualifications of people who enter the skilled trades in the precision metalworking area. The project is designed to: (1) determine "State of the Art" performance requirements for the precision tool machinist; (2) develop strategies for schools and businesses to use in portraying a more accurate image of the precision metalworking occupational area to students; and (3) disseminate the results of the project through presentations at precision metalworking industry meetings convened across the nation.

These are just a few examples of the many programs and projects funded under The Vocational Education Act in support of Apprenticeship Training.

Vocational education and apprenticeship have a variety of relationships and linkages that varies from State to State. Some of these relationships may include:

1. Evaluation and Assessment Services -- Joint evaluation and assessment of the apprentices.

2. Associate Degree Programs -- Granting of credit for successful completion of related instruction.

3. Pre-apprenticeship Experience -- Provided at the secondary school level.

4. Curriculum Development Projects

5. Instructor Training and Certification

6. Providing the required 144 clock hours of related instruction through vocational schools and community colleges

7. Advisory and Planning Boards -- Participation and serving on advisory councils and planning boards for apprenticeship.

In closing, I would like to refer to the new Federal vocational education legislation, the Carl D. Perkins Vocational Education Act of 1984. This Act holds a tremendous amount of promise for apprenticeship and vocational education linkages and collaboration.

There are 13 statutory provisions on the topic of apprenticeship with specific language encouraging such collaboration. The legislation provides for such activities as:

-- Expenditure for pre-apprenticeship and related instruction;

-- Job Training Partnership (JTPA) activities and linkages;

-- Counseling and Guidance;

-- Apprenticeship-School Linkages, and

-- Curriculum development.

The most significant aspect of the Carl D. Perkins Vocational Education Act, however, is the requirement that within one year after passage of the act, the Departments of Education and Labor are required to develop and implement an inter-agency agreement regarding collaboration of apprenticeship training and vocational education activities.

> "(e) Not later than one year after the date of enactment of the Carl D. Perkins Vocational Education Act, the Secretary of Labor and the Secretary of Education shall develop and implement a plan for greater coordination between vocational education programs and apprenticeship training programs. Linkages between such programs shall be established relating to apprentice-school programs,

AND PREAPPRENTICESHIP PROGRAMS, AND PROGRAM EVALUATION AND PERFORMANCE STANDARDS (PARTICULARLY WITH RESPECT TO APPRENTICESHIP TRAINING AND PROGRAMS OF RELATED INSTRUCTION). THE SECRETARIES SHALL ESTABLISH SUCH OTHER COLLABORATIVE AND COOPERATIVE EFFORTS AS ARE CONSIDERED FEASIBLE AND APPROPRIATE."

I FIRMLY ENDORSE THIS PROVISION, AND HAVE BEGUN PRELIMINARY DISCUSSION WITH MY STAFF ON THIS MATTER.

TODAY THERE IS A BROAD NATIONAL CONSENSUS FOR A PUBLIC POLICY THAT WOULD PROVIDE AN ADEQUATE NUMBER OF SKILLED CRAFTSMEN ACROSS OCCUPATIONAL CATEGORIES. THIS IS THE GOAL TO WHICH WE ALL MUST STRIVE.

AGAIN, LET ME REAFFIRM OUR COMMITMENT TO A STRONG PARTNERSHIP. TOGETHER, WE MUST EMBRACE THE CONCEPT OF PARTNERSHIP BETWEEN VOCATIONAL EDUCATION AND APPRENTICESHIP TRAINING, WITH THE EMPHASIS ON JOBS AND FULL EMPLOYMENT. TOGETHER, WE WILL MEET THE CHALLENGE OF INCREASING THE SKILLS AND PRODUCTIVITY OF AMERICA'S WORKFORCE.